

REMARKS

Applicant respectfully requests reconsideration and allowance of the subject application. Claims 1, 7, 23, and 32 are amended. Claims 58, 59, and 60 are canceled without prejudice. Claims 1-57 are pending in this application.

Allowed Claims

Claims 3, 4, 11-22, 25-27, 35-37, and 39-57 stand allowed.

Claims 7, 58, 59, and 60 stand objected to as being dependent upon a rejected base claim. As part of this response, claim 7 has been rewritten to incorporate its base claim (claim 1). Claim 58 has been canceled and incorporated into its base claim (claim 1), claim 59 has been canceled and incorporated into its base claim (claim 23), and claim 60 has been canceled and incorporated into its base claim (claim 32). Thus, Applicant respectfully submits that claims 7, 1, 23, and 32 are now in condition for allowance.

35 U.S.C. § 103

Claims 1, 2, 5, 6, 8-10, 23, 24, 28-34, and 38 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,078,701 to Hsu et al. (hereinafter "Hsu").

In order to expedite allowance of the present application, claims 1, 23, and 32 have been amended to incorporate dependent claims that were indicated as being allowable. The amendment of claims 1, 23, and 32 is not intended to be, and is not to be interpreted as, Applicant agreeing with the rejection of claims 1,

23, and 32 under 35 U.S.C. §103(a). Applicant reserves the right to pursue claims 1, 23, and 32 in one or more continuation applications.

Claim 1 has been amended to incorporate claim 58, which was identified in the October 22 Office Action as being allowable. Applicant thus respectfully submits that claim 1 is now in condition for allowance. Claims 2, 5, 6, 8, 9, and 10 depend from amended claim 1, and Applicant thus respectfully submits that claims 2, 5, 6, 8, 9, and 10 are now in condition for allowance at least because of their dependency on amended claim 1.

Claim 23 has been amended to incorporate claim 59, which was identified in the October 22 Office Action as being allowable. Applicant thus respectfully submits that claim 23 is now in condition for allowance. Claims 24, 28, 29, 30, and 31 depend from amended claim 23, and Applicant thus respectfully submits that claims 24, 28, 29, 30, and 31 are now in condition for allowance at least because of their dependency on amended claim 23.

Claim 32 has been amended to incorporate claim 60, which was identified in the October 22 Office Action as being allowable. Applicant thus respectfully submits that claim 32 is now in condition for allowance. Claims 33, 34, and 38 depend from amended claim 32, and Applicant thus respectfully submits that claims 33, 34, and 38 are now in condition for allowance at least because of their dependency on amended claim 32.

Applicant respectfully submits that, for at least these reasons, claims 1, 2, 5, 6, 8-10, 23, 24, 28-34, and 38 are now in condition for allowance.

Applicant respectfully requests that the §103 rejections be withdrawn.

Conclusion

Claims 1-57 are in condition for allowance. Applicant respectfully requests reconsideration and issuance of the subject application. Should any matter in this case remain unresolved, the undersigned attorney respectfully requests a telephone conference with the Examiner to resolve any such outstanding matter.

Respectfully Submitted,

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Version of Claims with Markings to Show Changes Made

1. (Twice Amended) One or more computer-readable media having stored thereon a computer program that, when executed by one or more processors of the computer, causes the one or more processors to perform acts including:

identifying a plurality of viewing rays to be used to construct, based on [a] previously captured concentric mosaics, a view image of a scene represented by the concentric mosaics;

checking whether each of the plurality of viewing rays coincides with at least a portion of a captured image;

for each viewing ray that coincides with at least a portion of a captured image, selecting the portion of the captured image;

for each viewing ray that does not coincide with at least a portion of a captured image, generating an interpolated portion by interpolating between at least two portions of one or more captured images based on a constant distance to objects in the scene; and

combining the selected and interpolated portions to generate the view image.

7. (Amended) [One or more computer-readable media as recited in claim 1,] One or more computer-readable media having stored thereon a computer

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program that, when executed by one or more processors of the computer, causes the one or more processors to perform acts including:

identifying a plurality of viewing rays to be used to construct, based on a previously captured mosaic, a view image of a scene represented by the mosaic,
wherein each of the plurality of viewing rays extends from a viewing point within a circular region defined by the mosaic;

checking whether each of the plurality of viewing rays coincides with at least a portion of a captured image;

for each viewing ray that coincides with at least a portion of a captured image, selecting the portion of the captured image;

for each viewing ray that does not coincide with at least a portion of a captured image, generating an interpolated portion by interpolating between at least two portions of one or more captured images based on a constant distance to objects in the scene; and

combining the selected and interpolated portions to generate the view image.

23. (Twice Amended) A method comprising:

generating, from [a mosaic] concentric mosaics and based on a plurality of viewing rays, a plurality of image values for a view of a scene;

using, as a first set of image values for the view, at least a portion of a captured image; and

using, as a second set of image values for the view, interpolated values generated by interpolating between at least two portions of one or more captured images based on a constant distance to objects in the scene.

32. (Twice Amended) A system comprising:

an observer interface to receive user input commands and identify a viewpoint and a direction of viewing based on the input commands; and

a view renderer, communicatively coupled to the observer interface, to receive the viewpoint and the direction of viewing, to generate values based on [a] previously captured concentric mosaics for a portion of an image of a scene represented by the concentric mosaics, and to interpolate between at least two captured images based on a constant distance to objects in the scene.

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